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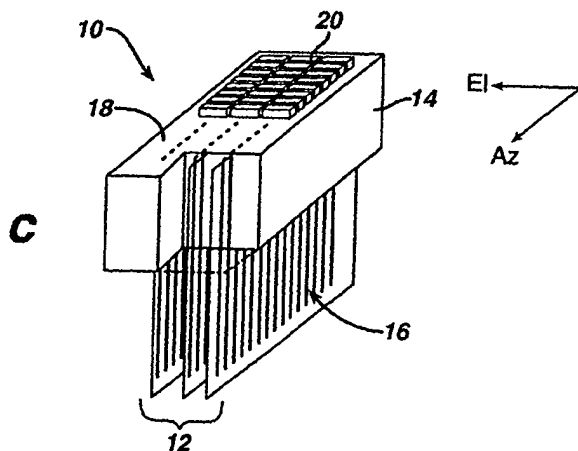
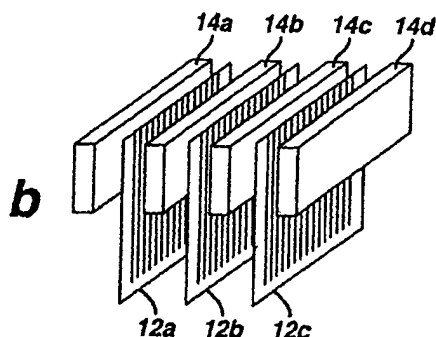
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[Continued on next page]

(54) Title: MULTIDIMENSIONAL ULTRASONIC TRANSDUCER ARRAYS



(57) Abstract: A two dimensional ultrasonic transducer array stack is described which has a backing block of acoustically absorbent material formed of alternating plates of backing material and flex circuits adhesively bonded together. The thickness of the plates establishes the elevational dimension between the flex circuits and corresponds to the elevational pitch of the two dimensional array. The backing block may also be formed by photoetching conductive traces directly on the plates of backing material, which are then adhesively bonded together to form the backing block.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 B06B1/06 G10K11/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B06B G10K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 329 498 A (GREENSTEIN MICHAEL) 12 July 1994 (1994-07-12)	1,2, 7-11,13, 16-19
A	column 5, line 30 - line 62; figure 1 column 6, line 3 - line 38 column 4, line 37 - line 42	6
X	EP 0 637 470 A (HEWLETT PACKARD CO) 8 February 1995 (1995-02-08)	1,5, 7-11,13, 16-19
X	US 5 559 388 A (SMITH LOWELL S ET AL) 24 September 1996 (1996-09-24)	1,5-7, 11,13, 16-19
A	column 4, line 18 -column 6, line 8; figures 3-5	8

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 01/13182

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6 288 477 B1 (GILMORE JAMES MICHAEL ET AL) 11 September 2001 (2001-09-11) cited in the application abstract -----	14

INTERNATIONAL SEARCH REPORT  
Information on patent family members

International Application No

PCT/EP 01/13182

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